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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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10/507,306

05/04/2005

Horst Zimmermann

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21967

7590

04/03/2006

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EXAMINER

ALLEN, STEPHONE B

ART UNIT

PAPER NUMBER

2878

DATE MAILED: 04/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

HD

| | | | |
|------------------------------|-------------------------------|-----------------------------------|--|
| Office Action Summary | Application No. 10/507,306 | Applicant(s) ZIMMERMANN ET AL. | |
| | Examiner Stephone B. Allen | Art Unit 2878 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 April 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the drawing presently filed contain handwritten identifiers. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

Claims 6, 9, 10-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 6, 9, 10 and 15, the phrase "in particular" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Those claims not specifically mentioned are indefinite due to their dependency.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 7, 8 and 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Publication No. 2002/0003649 to Feng.

With respect to claims 1, 7 and 8, Feng discloses an optoelectronic circuit consisting essentially of at least one photo-receiver, divided into several photo-diodes, (D1...Dn) and at least one transimpedance amplifier consisting of operational amplifiers (AMP1...AMPn); each partial photo-diode D1 is connected to an own transimpedance amplifier AMP1, and the electrical output signals of the transimpedance amplifiers are combined electrically by a summing amplifier (AMPs). The transimpedance amplifiers are wired as current-voltage converters.

The system of Feng is used in an environment for optical communication. Feng is silent as to the optical receiver being used in an arrangement wherein an optical fiber directs the light onto the optical receiver. It would have been obvious for one of ordinary skill in the art to use the system with optical fibers, since the use of optical receivers in optical communication systems wherein the means of directing the light is an optical fiber is well known in the art.

With respect to the method of claims 10 and 13-15, the method is inherent to the circuit claimed above.

With respect to claims 11 and 12, the exact size of the spot of light output from the fiber would have been obvious for one of ordinary skill in the art to decide according to the signal strength required and the information relayed through the fiber.

Claims 2-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Feng in view of the publication to Zimmerman.

With respects 2 and 6, Feng is silent as to the receiver/ photodiode is an integrated circuit. Zimmerman discloses wherein the receiver/ photodiode is an integrated circuit. . It would have been obvious for one of ordinary skill in the art to modify Feng to include IC receivers as disclosed in Zimmerman because this type of construction allows pure parallel processing of many chips.


With respects 3-5, Feng is silent as to the receivers being of CMOS, bipolar or BICMOS technology. Zimmerman discloses optical receivers made of CMOS, bipolar or BICMOS technology. It would have been obvious for one of ordinary skill in the art to modify Feng to include receivers as disclosed in Zimmerman in order to obtain an inexpensive and more efficient means of detecting the signal.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephone B. Allen whose telephone number is 571-272-2434. The examiner can normally be reached on M-F 08:30-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on 571-272-2328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2878

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Stephone B. Allen". The signature is fluid and cursive, with the first name "Stephone" and last name "Allen" clearly distinguishable.

Stephone B. Allen
Primary Examiner
Art Unit 2878

sba